

Chapter 2

Pollution Prevention:

A COOPERATIVE EFFORT

In October 1997, IDEM and the U.S. Environmental Protection Agency, Region 5 entered into its second partnership for protecting, enhancing and conserving Indiana's environment—the Environmental Performance Partnership Agreement, or EnPPA. The EnPPA represents a new approach to environmental protection that emphasizes setting priorities and using indicators to reach measurable environmental outcomes. Within the EnPPA there is a direct correlation among goals, daily tasks and fiscal activities. There are 10 broad range goals in the EnPPA. Two of the 10 Environmental/Strategic Goals are centered around OPPTA activities: "Prevent Pollution" and "Reduce Toxic Releases." From these two broad goals, several strategic goals and environmental objectives were developed to provide outcomes that complement OPPTA's ongoing pollution prevention activities. Please refer to the 1997 to 1999 Environmental Performance Partnership Agreement document for specific goals, objectives, indicators and outcomes.

IDEM recognizes that it cannot attain the EnPPA goals single-handedly. To reach the goals established by the EnPPA, the Office of Pollution Prevention and Technical Assistance took a cooperative approach. When defining objectives, OPPTA focused on issues where outreach, education and technical assistance could make a positive, achievable impact. For implementation, OPPTA worked with the Indiana Clean



"WE DO NOT INHERIT THE EARTH
FROM OUR ANCESTORS,
WE BORROW IT FROM OUR CHILDREN."

- Ancient Proverb

Manufacturing Technology and Safe Materials Institute, industry leaders, community organizations, academia and other governmental agencies to:

- Develop and administer positive recognition programs in pollution prevention and overall environmental performance for business leaders;
- Provide numerous educational workshops;
- Develop and support formal partnerships with leaders in pollution prevention; and
- Provide pollution prevention challenge grants to address specific issues.

Recognition Programs

IDEM established pollution prevention recognition programs based on specific criteria for good management practices, innovative technologies and other practices that go above and beyond compliance with environmental regulations. The recognition programs were developed with specific industrial sectors in mind. The purpose of the recognition programs is to formally recognize outstanding environmental performance of specific facilities. OPPTA utilized a cooperative approach by using industry-specific representatives to guide the process, develop instructional materials, solicit and nominate applicants and participate in the selection of award candidates.

Governor's Awards for Excellence in Pollution Prevention



The Governor's Awards for Excellence in Pollution Prevention have given manufacturers, businesses, organizations, vendors, educators and dedicated individuals recognition for their outstanding initiatives and an opportunity to demonstrate them to others.

Lt. Governor Kernan and former IDEM Commissioner John Hamilton presented the Fifth Annual Governor's Awards for Excellence in Pollution Prevention on September 23, 1998 at the First Indiana Pollution Prevention Conference and Trade Show, which was held during Pollution Prevention Week 1998. OPPTA hopes the award recipients feel recognized and that their peers witnessed the honor and prestige of the award.

The Sixth Annual Governor's Awards for Excellence in Pollution Prevention were presented on September 22, 1999. The award ceremony was once again included in the program of the Second Annual Indiana Pollution Prevention Conference and Trade Show. IDEM Commissioner Lori F. Kaplan provided plenary remarks.

Award Categories

1. **Pollution Prevention in Practice**—Programs that focus on input change, product reformulation, production process redesign and/or modification.
2. **Education and Outreach**—Programs that encourage, promote and assist Indiana businesses in reducing or eliminating the use of toxic materials or the generation of environmental wastes.
3. **Environmental Management System**—Pollution prevention achievements through certification of an EMS, such as ISO-14001.
4. **Mentor**—Organizations or individuals who share pollution prevention successes to benefit the environment in their communities.
5. **Research and Development**—Programs involving the research and development of new pollution prevention products or technologies.
6. **Agriculture**—Practices that decrease risk and environmental harm, reduce the use of water or other natural resources, minimize chemical inputs and/or protect sensitive areas.
7. **Energy**—Practices that increase efficiency or substitute environmentally benign fuel sources.

1998

Recipients of Governor's Awards for Excellence in Pollution Prevention

Mentor

- ! **Cinergy Corp.** in Plainfield created the annual Supplier Environmental Excellence Awards Program to mentor and encourage its suppliers and vendors to incorporate environmental stewardship and pollution prevention in their business practices. Cinergy also gives preference in competitive bidding to companies that demonstrate environmental stewardship.
- ! **World Wide Automotive Service** in Bloomington converted from a solvent to an aqueous parts cleaning solution; implemented an air-feed system for supplying automotive fluids to vehicles during maintenance and repair, reducing the risk of spills, fluid loss and fume releases; installed a computerized parts and materials management system that enhances its ability to identify and procure "environmentally friendly" products; and insists vendors of automotive fluids provide delivery in bulk containers. Owner and manager Donald Seader serves as an environmental mentor to his industry colleagues and requires his suppliers to provide products with reduced levels of toxins and hazardous substances.

Pollution Prevention in Practice

- ! **I/N Tek Steel Company** in New Carlisle implemented process modifications that resulted in reduced virgin oil purchases and consumption by 1,249,980 pounds annually, eliminated 2,435,280 pounds per year of oily wastewater and solids, which required treatment before landfill disposal, and eliminated 18.6 tons of oil filter waste that was previously landfill disposed. In addition, I/N Tek saved \$700,000 in virgin oil purchases and an additional \$80,000 in wastewater handling and disposal costs, offsetting the initial purchase and installation costs of equipment in the first 17 months. I/N Tek's parent companies are installing this process redesign throughout their northwest Indiana facilities.

1998 continued

Recipients of Governor's Awards for Excellence in Pollution Prevention

Pollution Prevention in Practice continued

- ! **Whirlpool Corporation** in Evansville switched to a paint process that releases fewer volatile organic compounds and worked with its coating manufacturer to reduce hazardous air pollutants in paint formulation. As a result, Whirlpool reduced volatile organic compound emissions by 42% (418 tons) and hazardous air pollutant emissions by 87% (504 tons) and eliminated 50,000 pounds of hazardous wastes. Additionally, because of reductions of xylene and toluene, Whirlpool closed two 6,000 gallon underground storage tanks and their associated liabilities. Whirlpool also installed a metal pretreatment process that saves 160 gallons of water per minute. Other benefits include the elimination of sulfuric acid and 2,400 cubic feet per year of special wastes. Cost savings from the new metal pretreatment process are more than \$1 million annually, including chemical purchase savings of 54%, and substantial decreases in water, electric and gas utility bills.

Research and Development

- ! **Eli Lilly and Company - Tippecanoe Laboratories** in Lafayette identified and substituted aqueous-based cleaners for solvent-based cleaners in three bulk manufacturing equipment cleaning processes. As a result, Lilly reduced the use of acetone, methyl alcohol and ethylene dichloride by 238 tons, and the production of hazardous waste by 222 tons and hazardous air pollutant emissions by six tons. Lilly developed other cleaning process improvements that resulted in higher efficiency and improved worker safety. The company spent \$5,200 for lab equipment and \$3,500 for training. The return has been a \$30,000 savings on cleaning solution costs in 1997. More significantly, the less toxic and more efficient cleaning processes freed up 33 days of manufacturing in 1997, a benefit of \$350,000. Based on this success, Lilly is implementing these cleaning technologies at its manufacturing sites around the world.
- ! **United Technologies Automotive** in Berne, in cooperation with the Indiana Clean Manufacturing Technology and Safe Materials Institute, developed a process to apply durable, weather-resistant finishes to exterior mirror housings that greatly reduces the quantity of paint and the associated emissions of volatile organic compounds and hazardous air pollutants. As a result of this new technology, the company enhanced paint application rates from 80 to 290 mirror housings coated per gallon of paint, greatly eliminating paint usage and the primer application altogether. A project for the Ford Taurus alone reduced 10 tons of volatile organic compound emissions. United Technologies Automotive expects to reduce 80 tons of volatile organic compounds at the Berne facility, in addition to 1.5 tons of hazardous air pollutants when it implements the new technology across the company. The net results will be a 30% reduction in hazardous air pollutants. The company invested more than \$50,000 in the research and expects to net more than \$150,000 in savings from paint and process modifications.

1999

Recipients of Governor's Awards for Excellence in Pollution Prevention

Education and Outreach

- ! **Madison Chemical Company Inc.** in Madison worked with its customers to eliminate hazardous waste by converting to less harmful chemicals. The project involved the elimination of oxalic acid and a zinc/nickel solution. Madison Chemical worked with Rotary Lift, which also received an award, to implement this project. The chemicals and processes are fully transferrable, and Madison Chemical pledged to work with IDEM and others to spread the pollution prevention message.

Energy

- ! **Evansville-Vanderburgh School Corporation** installed new heating, ventilating and air conditioning equipment and doors and windows in 20 buildings, greatly reducing energy consumption. Evansville-Vanderburgh schools now use less energy for heating and air conditioning than they previously used for heating alone. One of the major factors in the energy savings is the two-pipe system designed by Thomas Durkin of **Veazey, Parrott & Shoulders**, which saves construction dollars and uses only 30 percent of the energy of conventional four-pipe systems. By reducing energy consumption, the school system eliminated more than 4,000 tons of carbon dioxide and more than six tons of nitrogen oxides emissions.

1999 continued

Recipients of Governor's Awards for Excellence in Pollution Prevention

Energy (Honorable Mention)

- ! **Indianapolis Power and Light** in Indianapolis purchases all of the coke gas that **Citizens Gas** produces. IPL uses the coke to produce steam at its downtown Perry K plant. This reduces IPL's emissions, and is better for residents because there is no coke gas in the natural gas lines that supply homes and businesses.

Environmental Management System

- ! **General Seating of America** in Frankfort eliminated a gluing process from one of its seat manufacturing lines. By changing to a snap/buckle system, General Seating reduced hazardous air pollutants, volatile organic compounds and particulate matter emissions by more than 90 percent compared to previous emissions levels.

Pollution Prevention in Practice

- ! **Certified Metal Finishers** in Muncie developed a water-based, low volatile organic compounds carrier for solids in a Teflon-coating system. Previously, the carrier contained methyl ethyl ketone, methyl isobutyl ketone and toluene. The company spent five years in research developing this new compound. Because it uses this compound in the manufacturing of safety belts for vehicles, reliability of the new process is very important. The compound performs as well as previous chemicals and is safer for employees.
- ! **General Electric Plastics** in Mt. Vernon is one of the world's largest producers of plastic resins in the world. Its award-winning pollution prevention project involved the production of LEXAN®. By implementing a comprehensive methylene chloride reduction program, GE reduced its emissions by 70 percent.
- ! **Rotary Lift Company** in Madison produces hydraulic lifts used by vehicle maintenance shops. The company implemented a new process for rustproofing metal parts that reduced toxics in chemicals containing copper, selenium, fluorides and amines and produced no hazardous waste.
- ! **Utilimaster Corporation** in Wakarusa produces truck bodies and walk-in vans. The company's award-winning pollution prevention project involved the elimination of phosphorous from its vehicle wash/painting process, saving the town of Wakarusa's wastewater treatment plant more than \$100,000. In 1998, Utilimaster saved \$200,000 as a result of the P2 project.

Pollution Prevention in Practice (Honorable Mention)

- ! **Ingersoll Rand/Von Duprin** in Indianapolis installed a new paint system that reduced its air emissions.



Indiana 5-Star Environmental Recognition Programs

Participation in Indiana's 5-Star Environmental Recognition Programs is voluntary. To be eligible, businesses must be in full compliance with regulations, which are outlined in the manuals available from IDEM's Compliance and Technical Assistance Program. Applicants must submit a complete and accurate application. Businesses earn stars one level at a time, up to the pinnacle five-star award. Each level is a prerequisite for the next. A star remains in effect for two years, at which time a re-application is required. The review committee is made up of industry peers, public and environmental health professionals, and other interested persons.

Drycleaners

The 5-Star Environmental Recognition Program for Drycleaners is now operating with new, more challenging criteria. The new 5-Star criteria were effective September 1, 1998 and include mentoring other cleaners as one of the criteria for achieving a 5-Star rating. Solvent mileage, a measure of a drycleaner's efficient use of drycleaning solvent, continues to improve. Solvent consumption continues to drop throughout the state.

A list and map of drycleaners participating in the program was mailed out in February 1998 to about 7,000 interested parties, such as county health departments, environmental groups and solid waste management districts. The list on page 16 identifies current participants as of September 1999. The map on page 17 identifies the county locations of currently participating drycleaners that achieved the pinnacle five star rating since the inception of the 5-Star Environmental Recognition Program for Drycleaners.

A searchable drycleaner database is available on the Internet at www.state.in.us/idem/ctap/recognition/cleaners/search.html. This Web page enables the public to identify drycleaners that are participating in the Indiana 5-Star Environmental Recognition Program for Drycleaners. There are various options for searching the database, including a search by a particular city, a company name or by star rating.

Vehicle Maintenance Shops

The 5-Star Environmental Recognition Program for Vehicle Maintenance Shops awards stars for meeting specific criteria that go above and beyond regulations. IDEM, together with the Automotive Service Professionals of Indiana and other interested parties, began developing this program in 1998 to recognize shops that demonstrate exceptional environmental stewardship.

The 5-Star Review Committee held its first meeting in April 1999 to review the first round of applications. The list on page 16 identifies program participants who achieved a star rating during the first three rounds of the program. Applications are reviewed by the committee quarterly.

In order to meet the required criteria for the 5-Star program, shops are undertaking new, environmentally beneficial activities. Examples of these activities include:

- Replacing solvents with substitutes that are safer for the environment and/or human health;
- Taking extra precautions to ensure that hazardous wastes and materials are not spilled or poured into shop drains; and
- Recycling a number of used products, including oil, oil filters, antifreeze, batteries, tires and fluorescent light tubes.

IDEM continues to make shops throughout Indiana aware of its Vehicle Maintenance Initiative, which includes not only the 5-Star program, but also the *Compliance Manual for Indiana's Vehicle Maintenance Shops*. The manual was written in an easy-to-read style and addresses safety as well as environmental regulations. The initiative also includes on-site assistance to shops upon request and workshops, which are also held upon request of industry associations or other interested parties.



Child Care Facilities

The 5-Star Environmental Recognition Program for Child Care Facilities was rolled out in December 1998. The 5-Star Review Committee held its first meeting in April 1999 to review the first round of applications. Staff performed site visits, completed compliance checks and reviewed applications. The list on page 16 identifies program participants who achieved a star rating during the first three rounds of the program. Applications are reviewed by the committee quarterly.

Drycleaners



Armstrong Cleaners, Richmond (Wayne) and Winchester (Randolph) [2 locations]

Armstrong Formal Wear, Richmond (Wayne)

Bestway Cleaners, Anderson (Madison) [2 locations]

Classic Cleaners, Fishers (Hamilton) and Indianapolis (Marion) [11 locations]

Claytons Fine Drycleaning, Evansville (Vanderburgh), Mt. Vernon (Posey) and Newburgh (Warrick) [9 locations]

Don's Cleaners, Evansville (Vanderburgh) and Newburgh (Warrick) [8 locations]

Richmond Cleaners, Richmond (Wayne)

Southern Plaza Village Laundromat, Indianapolis (Marion)



40 Minute Cleaners, Indianapolis (Marion)

All About Clothes, Greensburg (Decatur)

Ermisch Cleaners, Terre Haute (Vigo) [3 locations]

Fabric Masters Dry Cleaning, Fishers (Hamilton)

Hilgers Laundry and Cleaners, Tell City (Perry)

One Hour Cleaners, Peru (Miami)

P & G 1-Hour Cleaners, Indianapolis (Marion)

Xaver Cleaners, Plymouth (Marshall)



Bloomington Cleaners, Bloomington (Monroe)

Huntingburg Laundry and Cleaners, Huntingburg (Dubois)

Jasper Laundry and Cleaners, Jasper (Dubois)

Keller Kleaners, Peru (Miami)

OK Modern Cleaners, Peru (Miami)

Tuchman Cleaners, Greenwood (Johnson), Indianapolis (Marion) and Zionsville (Boone) [25 locations]



45 Minute Cleaners, Indianapolis (Marion)

Brooks Quality Cleaners, Indianapolis (Marion)



Colonial Cleaners, Lowell (Lake) and Valparaiso (Porter) [2 locations]

Vehicle Maintenance Shops



American Electric Power - Baer Field Transportation Garage, Ft. Wayne (Allen)

Hirsch Ford-Lincoln-Mercury Inc., Michigan City (LaPorte)

Larry's AutoCare Inc., Griffith (Lake)

Stan Mize Towne & Countree Auto Sales Inc., Schererville (Lake)

O'Brien Toyota, Indianapolis (Marion)

Rolling Diesel Service, Rolling Prairie (LaPorte)

Smith Chevrolet, Hammond (Lake)

Strohm Automotive Inc., Indianapolis (Marion)

World Wide Automotive Service, Bloomington (Monroe)



City of South Bend Equipment Services Division, South Bend (St. Joseph)

City of Valparaiso Solid Waste, Recycling & Vehicle Maintenance, Valparaiso (Porter)

Marvin's Auto Service Inc., New Albany (Floyd)

Valparaiso Water Works Department, Valparaiso (Porter)



Indiana National Guard Combined Support Maintenance Shops, Indianapolis (Marion) and Edinburgh (Johnson)

Indiana National Guard Organizational Maintenance Shops,

Alexandria (Madison), Anderson (Madison), Atterbury (Johnson), Bedford (Lawrence), Bloomington (Monroe), Brazil (Clay), Crawfordsville (Montgomery), Elkhart (Elkhart), Evansville (Vanderburgh), Fort Wayne (Allen), Gary (Lake), Jasper (Dubois), Lafayette (Tippecanoe), New Albany (Floyd), Shelbyville (Shelby), Indianapolis (Marion), Kokomo (Howard), Logansport (Cass), Marion (Grant) and Richmond (Wayne)

O'Neil's Repair Service, Goodland (Newton)

Tom Wood Nissan/Subaru/Volkswagen, Indianapolis (Marion)



Wilson's Auto Service Inc., Washington (Davies)

Child Care Facilities



BCHS Child Care Center, Nashville (Brown)

Bloomington Developmental Learning Center, Bloomington (Monroe)

Children's EduCare Center, Fort Wayne (Allen)

Children's Learning Center of Posey County, Mount Vernon (Posey)

Circle of Mercy, South Bend (St. Joseph)

Community Childcare Center, Plainfield (Hendricks)

Dickman Daycare III & Teddy Bear Preschool, Fort Branch (Gibson)

Discovery Child Development Center, Franklin (Johnson)

First Friends Child Care Center, Richmond (Wayne)

KCARC Civitan Children's Center, Vincennes (Knox)

Kids Kampus, Huntington (Huntington)

Kidz Korner, Washington (Davies)

Kinder Care 0570, Columbus (Bartholomew)

Kybra Daycare, Bloomington (Monroe)

Lindsey's Home Day Care, Haubstadt (Gibson)

Mary's Care, Shelbyville (Shelby)

Monroe County United Ministries, Bloomington (Monroe)

Monroe County United Ministries/Preschool, Bloomington (Monroe)

North Star, South Bend (St. Joseph)

O'Happy Day Childcare & Preschool Inc., Logansport (Cass)

Our Lady of Good Hope Early Childhood Ministry, Fort Wayne (Allen)

Parkview Child Care Center, New Albany (Floyd)

Peppermint Palace Day Care & Learning Center, Lebanon (Boone)

Sandy's Small Wonders Home Day Care, Parker City (Delaware)

That Loving Learning Place, Valparaiso (Porter)

Wee Are The World, "Edu-Care," Nashville (Brown)

Wee Wisdom Nursery School and Child Care Center, Muncie (Delaware)



AYS Kindergarten/Preschool Harcourt, Indianapolis (Marion)

Cuddle Cottage, Nashville (Brown)

Deborah's Teeny World, Indianapolis (Marion)

Dena's Child Care Center, Indianapolis (Marion)

Dickman Daycare II, Fort Branch (Gibson)

Dover's Angels, Dover (Boone)

Fairview Presbyterian Church, Indianapolis (Marion)

First Meridian Heights Kindergarten, Indianapolis (Marion)

Kendallville Day Care Center Inc., Kendallville (Noble)

Little Tin Soldier, Lafayette (Tippecanoe)

Sunshine Preschool, Winslow (Pike)

Tender Moments Infant and Toddler Childcare, Terre Haute (Vigo)

Tender Tots Village, Evansville (Vanderburgh)

Tiny Tots Daycare, Delphi (Carroll)



Columbus Childcare Center Head Start, Columbus (Bartholomew)

Country Bumpkin Daycare & Preschool, Montgomery (Davies)

Dickman Daycare I, Fort Branch (Gibson)

Hickory Ridge Head Start, Morgantown (Morgan)

Hope Head Start, Hope (Bartholomew)

Loving Hands Day Care, Wabash (Wabash)

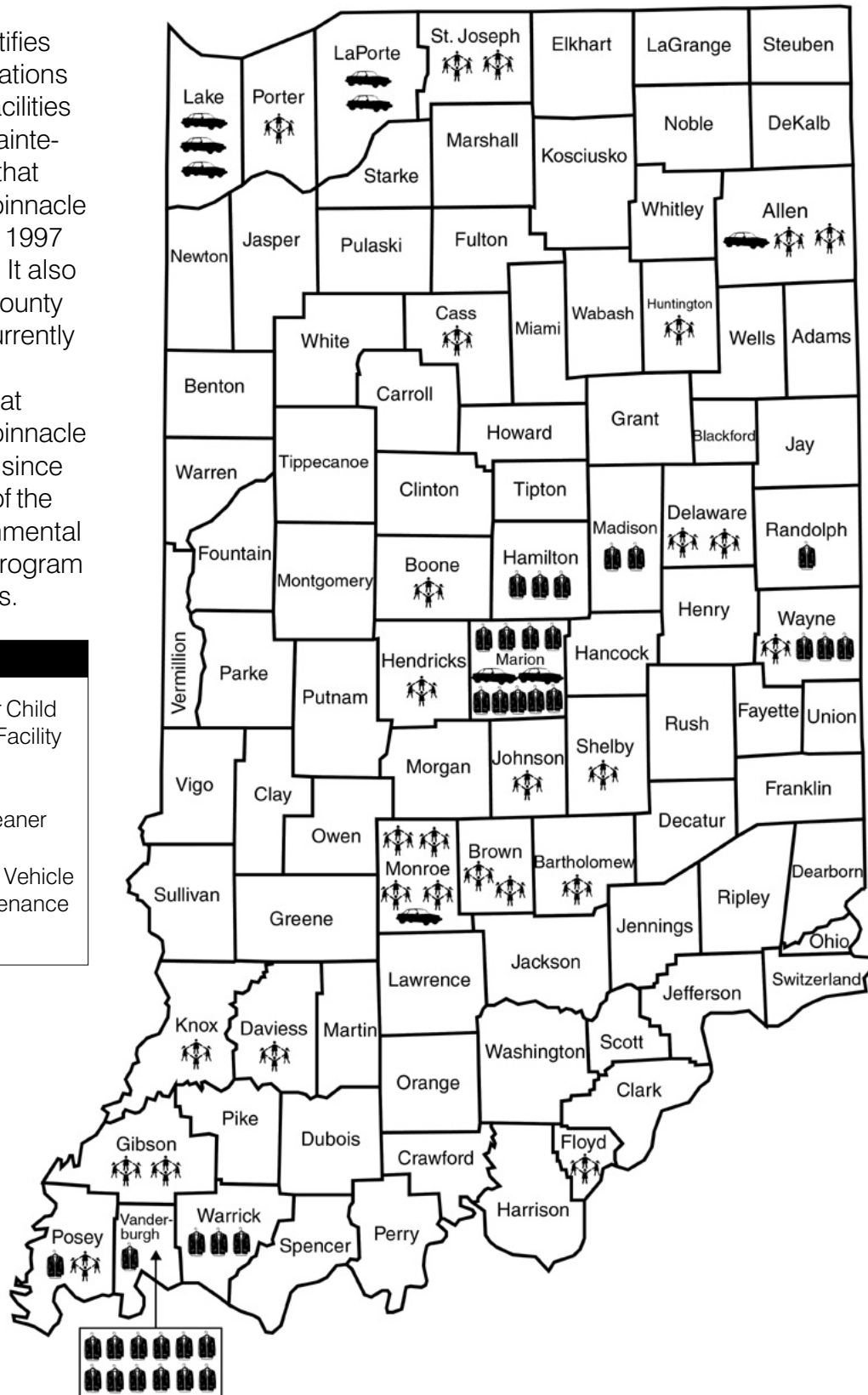
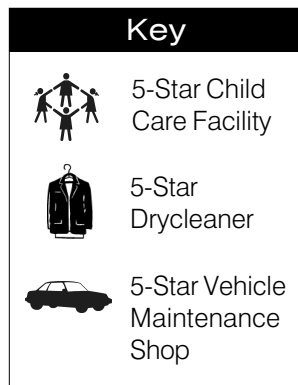
Russell Daycare, Indianapolis (Marion)

Seymour Head Start, Seymour (Jackson)

Westport Head Start, Westport (Decatur)

5-Star Award Recipients

This map identifies the county locations of child care facilities and vehicle maintenance shops that achieved the pinnacle five star rating 1997 through 1999. It also identifies the county locations of currently participating drycleaners that achieved the pinnacle five star rating since the inception of the 5-Star Environmental Recognition Program for Drycleaners.



Workshops: Outreach & Education

Outreach and education for businesses on pollution prevention opportunities are two of the Office of Pollution Prevention and Technical Assistance's primary roles. OPPTA provides information, resources and workshops to companies seeking to make pollution prevention a part of their everyday operations. OPPTA completed a series of successful workshops for drycleaners, vehicle maintenance shops and wood finishers. Toxic Release Inventory workshops were also held. The course evaluations have been uniformly positive.

Drycleaners

To help drycleaners comply with the regulations that affect them, OPPTA staff conducted five compliance workshops for drycleaners in September and October 1998. All the five workshops were a success. Most drycleaners in the 5-Star program are required to attend an annual training session.

Vehicle Maintenance Shops

To assist the vehicle maintenance industry, IDEM's Compliance and Technical Assistance Program conducted free confidential workshops throughout the state to provide personalized assistance to small businesses so they can better understand and comply with the regulations that affect them. Workshops are scheduled upon request from an industry association or group. To the right are lists of Vehicle Maintenance Workshops held in 1998 and 1999.

Toxic Release Inventory

In an effort to help Indiana businesses comply with Federal Toxic Releases Inventory reporting requirements, OPPTA provided outreach and educational workshops to facilities subject to the rules. The 1998 reporting year brought significant changes in reporting requirements. As a result of the changes, OPPTA sent out approximately 3,000 letters to facilities identified as possibly meeting reporting criteria. To clarify TRI reporting requirements, OPPTA held courtesy TRI workshops throughout the state. TRI workshops held in 1998 and 1999 are listed to the right.

Drycleaner Workshops

1998

| | | |
|--------------|--------------|-----------|
| Evansville | September 24 | 9 people |
| Indianapolis | September 30 | 36 people |
| Fort Wayne | October 1 | 9 people |
| Portage | October 7 | 14 people |
| New Albany | October 8 | 9 people |

Vehicle Maintenance Workshops

1998

| | | |
|--------------|--------------|-----------|
| Indianapolis | March 11 | 20 people |
| Hammond | March 25 | 59 people |
| New Albany | April 9 | 41 people |
| Fort Wayne | June 17 | 10 people |
| South Bend | July 22 | 15 people |
| Evansville | July 28 | 8 people |
| Lafayette | September 16 | 12 people |
| Bloomington | October 21 | 11 people |
| Madison | November 12 | 12 people |

1999

| | | |
|--------------|------------|-----------|
| Muncie | January 20 | 18 people |
| Portage | February 3 | 12 people |
| Indianapolis | March 16 | 11 people |

Toxic Release Inventory Workshops

1998

| | | |
|--------------|---------|-----------|
| Portage | May 19 | 30 people |
| Elkhart | May 27 | 40 people |
| Bloomington | May 28 | 20 people |
| Indianapolis | June 2 | 61 people |
| Ft. Wayne | June 10 | 30 people |

1999

| | | |
|----------------|----------|-----------|
| Michigan City* | April 27 | 65 people |
| Indianapolis | May 19 | 44 people |
| Scottsburg | May 24 | 27 people |
| Evansville | May 25 | 12 people |
| Indianapolis | May 26 | 30 people |
| Portage | May 27 | 13 people |
| Elkhart | June 10 | 36 people |

**Sponsored by U.S. Environmental Protection Agency.*

Wood Furniture Manufacturing

The Clean Air Act Amendment of 1990 requires certain companies to meet maximum achievable control technology standards established under the National Emission Standards for Hazardous Air Pollutants. Volatile, hazardous air emissions from wood furniture manufacturing operations will be tightly regulated as a result of the wood finishing NESHAP. IDEM would like to see 90% of Indiana's wood finishing operations comply with the NESHAP by using pollution prevention. To inform the industry of the NESHAP requirements and educate them on pollution prevention options for compliance, OPPTA provided educational workshops to the industry.

Workshops were held on October 20, 1998, in Jasper and October 28, 1998, in Elkhart. Of the 54 facilities required to comply with the NESHAP by December 1998, 43 representatives from approximately 18 facilities participated in the Jasper workshop, and five representatives from four facilities participated. In Elkhart, upon attending the workshop, it was determined that two of the facilities present were not subject to the NESHAP. A third workshop was held in Huntingburg, on December 2, 1998. This workshop was specifically for a facility that complied with the NESHAP by November 21, 1997. The session was a review for employees on the importance of proper spray techniques and accurate record keeping. Twenty employees were present.

Risk Management and Planning Outreach

Section 112 (r) or the Emergency Planning and Community Right to Know Act, which was enacted in 1996, requires companies that store or use certain chemicals above a specific quantity to develop and implement plans to prevent accidental releases to the environment, and improve response in the case of an emergency. The rules are meant to decrease the possibility and severity of public impact from industrial leaks and spills and to inform local emergency management systems of the potential for industrial hazards. These plans, known as risk management plans, were to be prepared and filed by June 21, 1999.

OPPTA sent letters to 183 Indiana industries identified as possibly needing to develop risk management plans. To assist affected companies comply with the rules and help business leaders manage this program as efficiently and effectively as possible, OPPTA is encouraging Indiana businesses to look at inherently safer technologies that will decrease the chances of accidents and ultimately prevent their occurrence. OPPTA assisted industries with:

- Identifying areas at facilities where a process or management change could help reduce or eliminate the potential risk associated with an accident;
- Identifying other resources to help the investigations for safer technologies;
- Becoming aware of regulatory barriers to chemical or process changes and worked with the regulatory programs to help open the way for change; and
- Recognizing facilities for implementing inherently safer technologies.

Formal Partnerships

Indiana Partners for Pollution Prevention



IDEM brought together the Partners for Pollution Prevention in 1996 to assist industry to share pollution prevention successes and to advise IDEM on pollution prevention policy and program development. The current membership is made up of approximately 100 businesses, organizations and individuals. Membership is completely voluntary.

In the spring of 1998, OPPTA provided the Clean Manufacturing Technology and Safe Materials Institute with a \$10,000 pollution prevention challenge grant to support a pollution prevention conference and trade show. With this support, the Partners for Pollution Prevention planned and

hosted the First Indiana Pollution Prevention Conference and Trade Show on September 22, 1998. The conference and trade show provided a perfect venue for the Fifth Annual Governor's Awards for Excellence in Pollution Prevention.

After months of planning and a supreme effort by many dedicated Partners for Pollution Prevention volunteers, the conference was conducted successfully in the middle of the National Pollution Prevention Week. Attendance was well in excess of 250 participants. Dave Kling from the U.S. Environmental Protection Agency was the keynote speaker. Lt. Governor Kernan and former IDEM Commissioner John Hamilton both made presentations at the conference. Evaluations were complimentary—the education was considered well focused, all of the speakers were judged to be experts with a message to convey, and the vendors were pleased with the audience response to their exhibits. The Second Annual Indiana Pollution Prevention Conference and Trade Show was held on September 22, 1999.

Partners for Pollution Prevention

3M Hartford City Plant, Hartford City
ABT Corp., Middlebury
Akron Foundry, Akron
Alpine Electronics, Greenwood
Altec Engineering, Elkhart
Amoco Petroleum Products, Whiting
Arrowhead Plastic Engineering Inc., Muncie
Atlas Chem-Milling, Elkhart
Benchmark Products Inc., Indianapolis
Best Access Systems, Indianapolis
BICC Cables, Marion
Certified Metal Finishers, Muncie
Chrysler Corporation, New Castle Machining & Forge, New Castle
Cinergy Corp., Cincinnati
Cinergy Corp., Plainfield
Clean Manufacturing Technology & Safe Materials Institute, West Lafayette
Coachmen Industries Inc., Middlebury
Coating Applications Research Lab, Purdue University, West Lafayette
Crane Naval Surface Warfare Center, PPO, Crane
Creative Expressions Group (James River Corp.), Indianapolis

Criterion Catalysts, Michigan City
Crown International Inc., Elkhart
CTS Corporation Resistor Products, Berne
Dana Corp., Preferred Technical Group, Columbia City
Delphi Delco Electronics Systems, Kokomo
Dexter Axle Div. - Tomkins Industries, Fremont
Discount Labels Inc., New Albany
Elco Textron Inc., Logansport
Eli Lilly and Company, Indianapolis
Eli Lilly and Company—Tippecanoe Labs, Lafayette
Elkhart Public Works & Utilities, Pretreatment, Elkhart
Environmental Management Institute Inc., Indianapolis
Evansville-Vanderburgh School Corporation, Evansville
Exide Corporation, Corydon
Federal Mogul Corp., Logansport
Flowers Communications, Indianapolis
G & T Industries of Indiana, Jasper & Bedford
Gaska Tape Inc., Elkhart

continued...

Partners for Pollution Prevention continued

GE Bloomington, Bloomington
General Electric Plastics, Mt. Vernon
General Seating of America, Frankfort
GM, Allison Transmission Division,
Indianapolis
GM Powertrain Bedford Castings, Bedford
Goshen Rubber Co., Goshen
Harrison Steel Castings Co., The, Attica
I/N Tek, New Carlisle
Indiana Manufacturers Association,
Indianapolis
Indiana Chamber of Commerce, Indianapolis
Indiana Environmental Institute Inc.,
Indianapolis
Indiana Automotive Fasteners, New Castle
Ispat Inland Inc., East Chicago
IU- SPEA, Bloomington
Jasper Rubber, Jasper
Johnson Controls Inc., Goshen
Knauf Fiber Glass GmbH, Shelbyville
LTV Steel Co., East Chicago
Madison Chemical Co. Inc., Madison
Millennium Environmental, Waterville, OH
Monaco Coach, Wakarusa
MPL Corporation, Fairland
Muncie Wastewater Treatment Plant, Muncie
Nachi Technology Inc., Greenwood
National Steel Corp., Portage
Natural Coating Systems LLC, Martinsville
Navistar International Transportation Co.,
Indianapolis

Nickell Moulding Company Inc., Elkhart
Northern Indiana Public Service Co.,
Hammond
Ogden Martin Systems of Indianapolis,
Indianapolis
PQ Corporation, The, Jeffersonville
Purdue University, West Lafayette
Reilly Industries Inc., Indianapolis
Rolls-Royce Allison, Indianapolis
Rotary Lift Company, Madison
Steel Dynamics Inc., Butler
Syndicate Sales, Kokomo
**Taylor University-Randall Environmental
Center**, Upland
Thomas & Skinner Inc., Indianapolis
United Technologies Automotive, Berne
United Technologies Carrier, Indianapolis
**United Technologies Electronic Controls
Inc.**, Huntington
Utilimaster Corporation, Wakarusa
Veazey, Parrott & Shoulders, Evansville
Viking Formed Products, Middlebury
Visteon Automotive Systems, Indianapolis
Wabash National Corp., Lafayette
Western Tar Products Corp., Terre Haute
Whirlpool Corporation, Evansville Division,
Evansville
World Wide Automotive Service,
Bloomington

IDEM and Department of Defense Partnership

In the spring of 1999, OPPTA began discussions with the Department of Defense to determine interest in forming a formal partnership between IDEM and various military installations located throughout Indiana. The initial meeting was attended by 36 high-level military officials from several installations located in Indiana and two representatives from the Pentagon in Washington, DC. A partnership charter was drafted during the summer and is in the process of being finalized. The purpose of this partnership is to promote pollution prevention within the military community and to provide IDEM with support in developing and implementing pollution prevention programs in the communities of participating installations.

Pollution Prevention Challenge Grants

Northwest Indiana Odor Reduction Grant

IDEM receives numerous calls from citizens from around the state regarding odors coming from various industries. In an effort to improve the quality of life for citizens bothered by industrial odors and the public image of industries with odor problems, IDEM is offering matching grants as seed money to industries to study, develop and implement pollution prevention measures that reduce or eliminate odor problems. The grants are being offered in Northwest Indiana as a pilot program to assess the need and effectiveness of this approach.

Purdue University's Department of Agricultural and Biological Engineering and the Clean Manufacturing Technology and Safe Materials Institute received a grant that will enable them to analyze data collected in Northwest Indiana from IDEM's Ambient Air Monitoring Program. The purpose of the grant effort is to look at potential odor-causing chemicals and trace the chemical signature back to certain processes or products that may produce the odor. This program is scheduled to end on December 16, 1999.

Pollution Prevention Conference Grant

In July 1998, OPPTA awarded a \$10,000, 50% matching challenge grant to Purdue University on behalf of the Indiana Clean Manufacturing Technology and Safe Materials Institute. The purpose of the grant was to fund the planning of the First Indiana Pollution Prevention Conference and Trade Show. The conference was coordinated and planned with cooperation from the Indiana Partners for Pollution Prevention. The conference was successfully conducted on September 23, 1998, with a small balance of the grant funds unspent. The unspent funds were used as "seed" money for the Second Annual Indiana Pollution Prevention Conference and Trade Show that occurred September 22, 1999. Both conferences were an excellent example of industry, academia and government working together toward a common goal—pollution prevention.

Pollution Prevention for Publicly-Owned Treatment Works Grants

OPPTA offered \$5000 non-competitive pollution prevention challenge grants to Publicly Owned Treatment Works with approved pretreatment programs to facilitate development of local programs that promote pollution prevention with their significant industrial users. Six local governments accepted grants and those projects are underway. The location of the grant recipients can be found on page 23.

A Pollution Prevention Challenge Grant was awarded to Millennium Environmental to provide training to industrial wastewater pretreatment operators in fall of 1997. Response to this two-day program in Indianapolis was excellent, with many of the 45 Indiana pretreatment programs participating. Additional training was conducted in Northwest Indiana, Auburn, Lafayette, Columbus, Clarksville and Evansville.

Pollution Prevention Wood Finishing Challenge Grants



The Indiana Clean Manufacturing Technology and Safe Materials Institute was contracted to develop compliance

assistance manuals for the wood finishing sector and fiber reinforced plastic manufacturers. Karen Teliha of OPPTA has visited several wood finishing and fiber reinforced plastic manufacturing facilities and met with several stakeholder groups to gain valuable information needed for the development of the manuals. Research is in progress on compliance issues for these industries, and CMTI has completed flow charts for the manufacturing operations, draft outlines and a few draft chapters. CMTI and IDEM met with a World Wide Web home page designer to discuss possibilities for the manuals to be placed on the Internet and made available in CD-ROM format. A draft outline of the wood furniture manual was completed by CMTI and is available on CD-ROM.

Governor's Awards for Excellence in Pollution Prevention

1999

Certified Metal Finishers, Muncie (Delaware)
Evansville-Vanderburgh School Corporation, Evansville (Vanderburgh)
General Electric Plastics, Mt. Vernon (Posey)
General Seating of America, Frankfort (Clinton)
Madison Chemical Company Inc., Madison (Jefferson)
Rotary Lift Company, Madison (Jefferson)
Utilimaster Corporation, Wakarusa (Elkhart)
Veazey, Parrott & Shoulders, Evansville (Vanderburgh)

1998

Cinergy Corporation, Plainfield (Hendricks)
Eli Lilly and Company-Tippecanoe Laboratories, Lafayette (Tippecanoe)
I/N Tek Steel Company, New Carlisle (St. Joseph)
United Technologies Automotive, Berne (Adams)
Whirlpool Corporation, Evansville (Vanderburgh)
World Wide Automotive Service, Bloomington (Monroe)

1997

Crane Naval Surface Warfare Center, Crane (Martin)
Delco Electronics Corporation, Kokomo (Howard)
Federal Mogul Corporation, Frankfort (Clinton)
Ford Motor Company, Indianapolis (Marion)
I/N Tek and I/N Kote, New Carlisle (St. Joseph)
National Steel Corporation, Portage (Porter)
Madison Chemical Company, Madison (Jefferson)
Monroe County Community School Corp. -Purdue University - Indiana University Integrated Pest Management Partnership, Bloomington (Monroe)
Swiss Plywood Corporation/Woodcrafters Inc., Tell City (Perry)

Environmental Management Systems ISO-14001 Grants

CMI - Precision Mold Inc., Bristol (Elkhart) - \$8,000
CMI - Wabash Cast Inc., Wabash (Wabash) - \$8,000
Ferro Corporation Liquid Coatings & Dispersions Division, Plymouth (Marshall) - \$5,000
Kobelco Metal Powder of America Inc., Seymour (Jackson) - \$8,000
Othy Inc., Warsaw (Kosciusko) - \$8,000
Nishikawa Standard Co. (New Haven Facility), Fort Wayne (Allen) - \$8,000
Plasfinco Inc., North Vernon (Jennings) - \$8,000
Thermoset Lord Chemical Products (formerly Thermoset Plastics Inc.), Indianapolis (Marion) - \$5,000

Pollution Prevention Challenge Grants

1998

City of Elkhart (Elkhart) - \$5,000
City of Kokomo (Howard) - \$5000
City of Madison (Jefferson) - \$5000
City of North Vernon (Jennings) - \$5000
City of Princeton (Gibson) - \$5000
Indianapolis Department of Public Works (Marion) - \$5000
Purdue University, West Lafayette (Tippecanoe) - \$10,000

1997

Akron Foundry, Fulton (Fulton) - \$24,000
Altec Engineering, Elkhart (Elkhart) - \$25,000
Elco Textron, Logansport (Cass) - \$10,000
Ivy Tech State College, Northwest Region- \$25,000
Millennium Environmental, Waterville, OH - \$25,890
Purdue University, West Lafayette (Tippecanoe) - \$50,000
Syndicate Sales Inc., Kokomo (Howard) - \$18,800
Taylor University, Upland (Grant) - \$16,100

Indiana Clean Manufacturing Technology & Safe Materials Institute Case Study Participants

AM General Corp., Mishawaka (St. Joseph)
American Lifts, Greensburg (Decatur)
Atlas Foundry, Marion (Grant)
Child Craft Industries, Salem (Union)
Electrochemical Coatings, Lebanon (Boone)
Ferro Corporation Liquid Coatings & Dispersions Division, Plymouth (Marshall)
Fleetwood Travel Trailers of Indiana, Crawfordsville (Montgomery)
ITW-Micro-Poise, Indianapolis (Marion)
Lacay Fabrication and Manufacturing Inc., South Bend (St. Joseph)
Middlebury Hardwood Products Inc., Middlebury (Elkhart)
Nickell Moulding Co., Elkhart (Elkhart)
Par-Kan Company, Silver Lake (Kosciusko)
Pierce Company, Upland (Grant)
Swiss Plywood, Tell City (Perry)
United Technologies Automotive, Berne (Adams)
Vincent Bach, Elkhart (Elkhart)

Award and Grant Recipients

This map identifies the county locations of recipients of:

- ! Governor's Awards for Excellence in Pollution Prevention,
- ! Pollution Prevention Challenge Grants, and
- ! Environmental Management System ISO-14001 Grants.

Black icons indicate the award was made 1997 through 1999. Gray icons indicate the award was made before 1997.

| Key | |
|---|----------------------------|
|  | Governor's Award Recipient |
|  | Challenge Grant Recipient |
|  | ISO-14001 Grant Recipient |

